



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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ATLANTA, GEORGIA 30303-8960

May 27, 2008

Will Sloger
Naval Facilities Engineering Command, Southeast
2155 Eagle Drive
Charleston, South Carolina 29406

SUBJECT: Draft Environmental Impact Statement for the Proposed Homeporting of
Additional Surface Ships at Naval Station Mayport, Duval County, Florida;
CEQ Number 20080103

Dear Mr. Sloger:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act. The U.S. Department of the Navy (Navy) proposes to homeport various types of surface ships, including the reassignment of operational staff, dependents, and other personnel to Naval Station (NAVSTA) Mayport, Duval County, Florida.

Thirteen alternatives were considered in the Draft EIS, including the no action alternative. The no action alternative represents no proposed additional homeporting and also includes the decommissioning of several surface ships currently homeported at NAVSTA Mayport. The 12 action alternatives incorporate homeporting various types and numbers of ships, including: cruisers, destroyers, frigates, amphibious assault ships, amphibious transport dock ships, dock landing ships, and a nuclear powered aircraft carrier (CVN). Depending on the specific alternative, this could involve a considerable amount of new work dredging and disposal of dredged material, maintenance facilities improvements, utilities upgrades, wharf improvements, personnel support improvements, parking facilities and traffic improvements, or construction of nuclear propulsion plant maintenance facilities. Several alternatives could be implemented as early as 2009; others would not be fully implemented until 2014. A preferred alternative has not been selected or identified in the Draft EIS.

While the alternatives represent a wide range of homeporting scenarios, the 12 action alternatives are grouped into three fundamental categories based on common components. The three categories include: 1) Group 1 – these alternatives involve only homeporting of surface ships, require minimal construction activities, and no new dredging; 2) Group 2 – these alternatives involve homeporting of surface ships and/or new dredging to allow access and berthing of one CVN, not to be permanently stationed at NAVSTA Mayport; and 3) Group 3 – these alternatives involve homeporting one CVN and other surface ships, and necessary new dredging to support these assets. The total personnel gain at NAVSTA Mayport due to the

proposed action would range from 0 (Alternative 3) to approximately 7,158 (Alternative 12), including military personnel and civilian employees.

To accommodate one CVN, either visiting or permanently stationed at NAVSTA Mayport, the NAVSTA Mayport turning basin, entrance channel and the Jacksonville Harbor Bar Cut federal navigation channel would require dredging to a depth of – 50 feet (ft) Mean Lower Low Water (MLLW). The actual project deepening is proposed to be – 50 ft MLLW, plus – 2 ft of advance maintenance, plus – 2 ft of allowable overdepth for a total depth of – 54 ft MLLW. This proposed deepening would involve the excavation of an estimated 5.7 million cubic yards of dredged material. The dredging project could be implemented as early as 2010 and occur over the course of 12 to 18 months. Dredging operations typically occur continuously, up to 24 hours per day, seven days per week. The Navy proposes to dispose of the dredged material from the deepening project in the ocean in an ocean dredged material disposal site (ODMDS) managed by the U.S. Army Corps of Engineers (USACE) and EPA. Two alternative ODMDS locations are considered in the Draft EIS. In the event that any dredged material does not meet EPA parameters for ocean disposal, it would be disposed of at existing permitted upland disposal sites.

EPA offers the following comments from our review of the Draft EIS:

Dredged Material Disposal

The Draft EIS does not include adequate justification for the need for advance maintenance dredging as part of the proposed action (see Section 2.3.1.1). The fact that the USACE routinely conducts advance maintenance of two feet in the project vicinity is not adequate to justify the environmental impact of disposal of 1.2 million cubic yards of extra dredged material. This amounts to increasing the amount of dredged material by more than one-third (37%). Additional discussion is warranted in regard to the need for two feet of advance maintenance and two feet of allowable paid overdepth dredging for all dredging segments. For example, is this needed in the turning basin or just the entrance channel? As only 44 feet is needed for the draft of the vessels (plus six feet for intakes), is four feet beyond 50 feet warranted considering the issues with disposal of dredged material volumes?

EPA recommends that the Final EIS explain why advance maintenance is required or recommended for all dredging segments. The USACE typically recommends advance maintenance in critical and fast-shoaling areas based on justification in a feasibility report (January 2006 Memorandum for Commanders). This type of justification for advance maintenance has not been provided in the Draft EIS and should be provided in the Final EIS. In addition, a brief literature search has indicated that advance maintenance was beneficial in some, but not all, cases and that it should be evaluated on a case-by-case basis (USACE Engineering Research Development Center, 1985, Effects of Depth on Dredging Frequency. Report 3. Evaluation of Advance Maintenance Projects). EPA's Ocean Dumping Regulations (40 CFR Part 227) also require an analysis of the need for ocean dumping. As part of the permitting process, the need for advance maintenance will need to be more thoroughly addressed.

The Draft EIS also does not provide an estimate of future increases in maintenance

dredging requirements as a result of deepening. This is a cumulative impact of the overall project that should be addressed. As stated in the Draft EIS, the Jacksonville ODMDS has limited capacity. Any increases in maintenance quantities will likewise impact the long-term capacity of the ODMDS. Analysis of maintenance quantities at the nearby St. Marys Entrance Channel indicated that deepening of the channel resulted in a three-fold increase in maintenance quantities (Pope et. al, 1994, "History of Entrance Channel Dredging and Disposal Operations: St. Mary's Georgia/Florida"). The Draft EIS states that, "Due to increased depth, maintenance dredging requirements would be expected to increase." However, the Draft EIS assumes the same annual historic disposal rate at Jacksonville ODMDS for the purposes of developing disposal options. EPA recommends that the Final EIS include estimates of these future increases in maintenance dredging due to project deepening

EPA agrees that the capacity of the Jacksonville ODMDS is limited, and currently there are annual management limitations for ocean disposal at Fernandina ODMDS. EPA proposes to work with the Navy in the development of the Final EIS in selecting a preferred alternative that identifies options for ocean disposal of dredged material. However, final decisions regarding volumes that can be disposed at the Jacksonville and Fernandina ODMDS will be made during the permitting process and will depend in part on the projected increases in maintenance quantities and on the commitments made by the Navy in participating in expansion of the ODMDS or designation of a new ODMDS.

Water Quality

The Draft EIS identifies a number of waterbodies in the study area, including the St. Johns River, which are not meeting their designated uses. EPA is concerned about further secondary and cumulative pollutant loads and exacerbated stormwater problems that can be caused directly or indirectly from development associated with new facilities construction, new parking structures, and roadway improvements. EPA suggests employing the use of Low Impact Development (LID) practices in the engineering, design, and construction of support facilities, including parking structures. LID practices are designed to replicate pre-development hydrologic characteristics and prevent an increase in pollutant loads above pre-development conditions. LID utilizes existing site characteristics to infiltrate, evaporate, and retain increased runoff volumes resulting from site development. The Navy should, at a minimum, integrate stormwater control features on these surface parking lots so that the large impervious features do not add to stormwater problems in the St. Johns River or other surface waters. The use of LID activities such as pervious parking lots, stormwater ponds, or other retention devices should be used to maintain hydrographic conditions and prevent further deterioration of environmental quality, including downstream aquatic and riparian habitats. Information on low-impact development can be obtained from: www.lowimpactdevelopment.org.

Air Quality

The Draft EIS considers only criteria air pollutants and potential impacts of the National Ambient Air Quality Standards (NAAQS). Criteria pollutants are important, affecting air quality over a large region. However, the Draft EIS does not address hazardous air pollutants or "air

toxics” which can cause cancer and other serious health effects among people living or working in the vicinity of the sources. The Group 3 Alternatives at NAVSTA Mayport will involve mobile sources (transportation, construction, and service vehicles), area sources, and indoor sources that will emit air toxics in the vicinity of significant numbers of people who work and live at NAVSTA Mayport. Area and mobile sources contribute significantly to the nationwide risk from breathing outdoor sources of air toxics, according to EPA's National-Scale Air Toxics Assessment for 1999 (<http://www.epa.gov/ttn/atw/nata1999>). EPA recommends that the Final EIS address ways to reduce or mitigate the impact of these emissions on people.

EPA published a final rule in February 2007 addressing the control of hazardous air pollutants from mobile sources. That rule provides new standards for exhaust and evaporative emissions from passenger vehicles, new limits on the benzene content of gasoline, and standards for portable fuel containers that will reduce emissions of toxics from gas cans that can be found in many garages. Details concerning this rule can be found in the Federal Register, Volume 72, Number 37, February 26, 2007, Page 8428. Looking beyond these regulations, there are numerous actions that NAVSTA Mayport could take to reduce exposures from mobile sources. For example, NAVSTA Mayport could establish anti-idling policies for trucks; retrofit diesel engines to reduce emissions; require that all construction diesels be retrofitted; and promote alternative transportation management options (see comments below on Traffic).

Indoor sources of air toxics are particularly significant because the typical person spends 90 percent of his/her time indoors, leading to long exposure times. The Draft EIS does not include a discussion of building construction practices for proposed new military construction. EPA recommends that all vertical building construction projects attempt to follow the Leadership in Energy and Environmental Design (LEED) Green Building Rating System to become LEED certified in accordance with the U.S. Green Building Council, as practicable. The LEED program promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. Indoor environmental quality should be a priority in the design and construction of these buildings, as much as practicable. EPA also suggests that the Navy consult EPA's Indoor Air Quality website (www.epa.gov/iaq) for suggestions on how to reduce indoor pollution sources.

Traffic

The Draft EIS concludes that there would be negative traffic impacts resulting from implementation of Alternatives 10 and 12. Based on potential increases in the number of intersections that are failing, EPA has concerns about localized carbon monoxide (CO) hot-spots that would be created as a result of the proposed action. EPA's primary concern is the lack of any discussion of consideration of alternative transportation management strategies for NAVSTA Mayport to address the transportation system deficiencies that would be created by the selection of either Alternatives 10 or 12. For example, the Draft EIS does not describe any on-base and off-base mass transit options for Mayport employees and families. The Draft EIS does suggest that, “Use of satellite parking and shuttle services and alternate modes of transportation to reduce the number of POVs on-Station during the period of construction also would reduce impacts.”

Under Air Quality, the Draft EIS states as potential mitigation measures, "...if the Navy proceeds with Alternatives 10 or 12, then proactive practices to minimize the impact of increased mobile source emissions could be considered, such as car pooling, encouraging the use of hybrid vehicles, providing mass transit for employees, and other similar possibilities."

EPA supports the above described potential mitigation measures and recommends that the Navy consider inclusion of these as commitments in the Final EIS. Improvements considered should include congestion management systems, transportation system management projects, corridor management plans that look at access along entire corridors, and transit improvements. Given the potential air quality concerns associated with these transportation deficiencies, EPA recommends that NAVSTA Mayport develop a comprehensive alternative transportation program, especially for commuters. This program should promote telecommuting, the use of mass transit, and car pooling, and establishing no-cost or low-cost mass transit (possibly hybrid electric or natural gas powered) between popular points on the base and in the surrounding communities. This initiative could be similar to those programs developed by other military installations, such as Fort Bragg and Camp Pendleton. By providing useable and convenient alternatives to driving, these installations have made significant steps towards helping the areas maintain or improve air quality as well as improving level-of-service problems at key intersections by decreasing the expected traffic demand. This type of program would benefit the environment while simultaneously providing a benefit for many in the NAVSTA Mayport community.

We rate this document EC-2 (Environmental Concerns-with more information requested). We have concerns that the proposed action identifies the potential for impacts to the environment that should be avoided/minimized. Enclosed is a summary of definitions for EPA ratings. We appreciate the opportunity to review the proposed action. Please contact Ben West of my staff at (404) 562-9643 if you have any questions or want to discuss our comments further.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosure

U.S. ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL IMPACT STATEMENT (EIS) RATING SYSTEM CRITERIA

EPA has developed a set of criteria for rating Draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft.

RATING THE ENVIRONMENTAL IMPACT OF THE ACTION

- LO (Lack of Objections): The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.
- EC (Environmental Concerns): The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.
- EO (Environmental Objections): The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental objections can include situations:
 1. Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;
 2. Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;
 3. Where there is a violation of an EPA policy declaration;
 4. Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or
 5. Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.
- EU (Environmentally Unsatisfactory): The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:
 1. The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;
 2. There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or
 3. The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.

RATING THE ADEQUACY OF THE ENVIRONMENTAL IMPACT STATEMENT (EIS)

- 1 (Adequate): The Draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- 2 (Insufficient Information): The Draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the Draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the Final EIS.
- 3 (Inadequate): The Draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the Draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the Draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised Draft EIS.